Format No: CP/TF/01

## TEST REPORT ON COARSE AGGREGATES

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2019-09-12-33** **Date: 16-08-19** |
| **Customer** | : | Assistant Executive Engineer, Dasarahalli Sub Division, BBMP, Bangalore. |
| **Address** | : | Dasarahalli Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Improvements to Roads Drains and Other Development Works in Bagalagunte Ward No.14. |
| **Agency** | : | Sri Raghunandan L, #13, 2nd Main Road,Gandhigrama Maruthi Extension, Bengaluru-21. |
| **Customer Reference** | : | EE/DD/WO/360/19-20 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 14-08-19 |
| **Sample Type/ Size** | : | 20mm down size coarse aggregate |
| **Reference to BIS codes** | : | IS: 383:2016 (Specification for Coarse and fine Aggregates )<br>IS: 2386 :1963(Part - 1,3,4) RA2011<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption<br>IS 2386 Part 4: Mechanical Properties |
| **Date of test** | : | 14-08-19 |

**SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:**

**Total weight taken : 5000 grams**

| Sample No. | Sieve No. | Weight Retained in gms | Cumulative Weight Retained in gms | % Cumulative Weight Retained | % Passing | Required as per IS 383:2016 |
|---|---|---|---|---|---|---|
| 1 | 40 mm | 0 | 0 | 0 | 100 | 100 |
| 2 | 20 mm | 245 | 245 | 4.9 | 95.1 | 90-100 |
| 3 | 10 mm | 2560 | 2805 | 56.1 | 43.9 | 25-55 |
| 4 | 4.75 mm | 2033 | 4838 | 96.8 | 3.2 | 0-10 |
| 5 | Pan | 162 | 5000 | 100 | 0 | _ |



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# TEST REPORT OF FINE AGGREGATE

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2019-09-12-33** **Date: 16-08-19** |
| **Customer** | : | Assistant Executive Engineer, Dasarahalli Sub Division, BBMP, Bangalore. |
| **Address** | : | Dasarahalli Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Improvements to Roads Drains and Other Development Works in Bagalagunte Ward No.14. |
| **Agency** | : | Sri Raghunandan L, #13, 2nd Main Road,Gandhigrama Maruthi Extension, Bengaluru-21. |
| **Customer's Reference** | : | EE/DD/WO/360/19-20 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 14-08-19 |
| **Sample Type** | : | Fine Aggregate |
| **Reference to BIS codes** | : | IS 383 : 2016 (Specification for Coarse and fine Aggregates)<br>IS: 2386 :1963(Part - 1, 3) RA2012<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption |
| **Date of test** | : | 14-08-19 |
| **Total weight taken** | : | 1000 grams |

| Sl.no | Sieve Size | Weight Retained (gms) | Cumulative Weight Retained (gms) | % Cumulative Weight Retained | % Passing | Requirement as per IS 383:2016 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grading Zone I | Grading Zone II | Grading Zone III | Grading Zone IV |
| 1 | 10 mm | 0 | 0 | 0.0 | 100.0 | 100 | 100 | 100 | 100 |
| 2 | 4.75 mm | 27 | 27 | 2.7 | 97.3 | 90-100 | 90-100 | 90-100 | 95-100 |
| 3 | 2.36 mm | 55 | 82 | 8.2 | 91.8 | 60-95 | 75-100 | 85-100 | 95-100 |
| 4 | 1.18 mm | 239 | 321 | 32.1 | 67.9 | 30-70 | 55-90 | 75-100 | 90-100 |
| 5 | 600 micron | 205 | 526 | 52.6 | 47.4 | 15-34 | 35-59 | 60-79 | 80-100 |
| 6 | 300 micron | 203 | 729 | 72.9 | 27.1 | 5-20 | 8-30 | 12-40 | 15-50 |
| 7 | 150 micron | 191 | 920 | 92.0 | 8.0 | 0-10 | 0-10 | 0-10 | 0-15 |
| 8 | Pan | 80 | 1000 | 100.0 | 0.0 | --- | --- | --- | --- |

**Result :The tested Sample Conforms to Grading Zone II**



ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು.
ಜ. ದಾಸರಹಳ್ಳಿ ಉಪ ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ. ಜ.ಜ.ಎಂ.ಪಿ
ಬೆಂಗಳೂರು 560073

CIVIL Pro Sig. Date. BANGALORE

Format No: CP/TF/01

# TEST REPORT OF CEMENT CONCRETE CUBES

**Lab ID** : **CP-2019-09-12-33** **Date: 02/09/2019**

**Customer** : Assistant Executive Engineer, Dasarahalli Sub Division, BBMP, Bangalore.

**Address** : Dasarahalli Sub Division, BBMP, Bangalore.

**Project Name** : Improvements to Roads Drains and Other Development Works in Bagalagunte Ward No.14.

**Agency** : Sri Raghunandan L, #13, 2nd Main Road,Gandhigrama Maruthi Extension, Bengaluru-21.

**Customer's Reference** : EE/DD/WO/360/19-20

**Source of Sample** : Sample supplied by Agency

**Sample Condition** : Satisfactory

**Date of Receipt** : 28-08-19

**Customer ID** : Drain Side Wall Concrete

**Sample Type /Size** : 150X150X150 mm

**Sample grade/Age** : M20 / 7 Days Compressive Strength

**Reference to BIS codes** : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

**Date of test** : 02/09/2019

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength ($N/mm^2$) | Average Compressive Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Drain Side Wall Concrete | M20 | 26/08/2019 | 02/09/2019 | 150.49 X 151.28 X 149.50 | 22765 | 8.046 | 415.2 | 18.2 | 18.5 |
| 2 | Drain Side Wall Concrete | M20 | 26/08/2019 | 02/09/2019 | 149.79 X 149.49 X 150.79 | 22391 | 8.386 | 422.8 | 18.9 | |
| 3 | Drain Side Wall Concrete | M20 | 26/08/2019 | 02/09/2019 | 150.40 X 149.00 X 149.30 | 22410 | 8.364 | 412.6 | 18.4 | |

**Note:**

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
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Samples will be disposed after 90 days from the date of issue of test certificate

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ಬಿ. ದಾಸರಹಳ್ಳಿ ಉಪ ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಜಿ.ಕೆ.ಎಂ.ಪಿ
ಬೆಂಗಳೂರು-560073

CIVIL PRO Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager


****End of Report****

Format No: CP/TF/01

# TEST REPORT OF CEMENT CONCRETE CUBES

**Lab ID** : CP-2019-09-12-33 **Date: 18/09/2019**

**Customer** : Assistant Executive Engineer, Dasarahalli Sub Division, BBMP, Bangalore.

**Address** : Dasarahalli Sub Division, BBMP, Bangalore.

**Project Name** : Improvements to Roads Drains and Other Development Works in Bagalagunte Ward No.14.

**Agency** : Sri Raghunandan L, #13, 2nd Main Road,Gandhigrama Maruthi Extension, Bengaluru-21.

**Customer's Reference** : EE/DD/WO/360/19-20

**Source of Sample** : Sample supplied by Agency

**Sample Condition** : Satisfactory

**Date of Receipt** : 13-09-19

**Customer ID** : Cement Concrete Pavement

**Sample Type /Size** : 150X150X150 mm

**Sample grade/Age** : M30 / 7 Days Compressive Strength

**Reference to BIS codes** : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

**Date of test** : 18/09/2019

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength ($N/mm^2$) | Average Compressive Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Cement Concrete Pavement | M30 | 11/09/2019 | 18/09/2019 | 149.71 X 149.85 X 150.97 | 22435 | 8.122 | 574.5 | 25.6 | 25.5 |
| 2 | Cement Concrete Pavement | M30 | 11/09/2019 | 18/09/2019 | 149.27 X 149.73 X 149.48 | 22350 | 8.619 | 586.0 | 26.2 | |
| 3 | Cement Concrete Pavement | M30 | 11/09/2019 | 18/09/2019 | 149.70 X 151.71 X 149.01 | 22711 | 8.991 | 563.8 | 24.8 | |

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**R KARTHIK RECHAN**
Authorized Signatory
**Quality Manager**



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# TEST REPORT OF CEMENT CONCRETE CUBES

**Lab ID** : CP-2019-09-12-33 **Date: 19/09/2019**

**Customer** : Assistant Executive Engineer, Dasarahalli Sub Division, BBMP, Bangalore.

**Address** : Dasarahalli Sub Division, BBMP, Bangalore.

**Project Name** : Improvements to Roads Drains and Other Development Works in Bagalagunte Ward No.14.

**Agency** : Sri Raghunandan L, #13, 2nd Main Road,Gandhigrama Maruthi Extension, Bengaluru-21.

**Customer's Reference** : EE/DD/WO/360/19-20

**Source of Sample** : Sample supplied by Agency

**Sample Condition** : Satisfactory

**Date of Receipt** : 14-09-19

**Customer ID** : Cement Concrete Pavement

**Sample Type /Size** : 150X150X150 mm

**Sample grade/Age** : M30 / 7 Days Compressive Strength

**Reference to BIS codes** : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

**Date of test** : 19/09/2019

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength ($N/mm^2$) | Average Compressive Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Cement Concrete Pavement | M30 | 12/09/2019 | 19/09/2019 | 150.18 X 150.73 X 151.52 | 22637 | 8.122 | 587.5 | 26.0 | 25.7 |
| 2 | Cement Concrete Pavement | M30 | 12/09/2019 | 19/09/2019 | 149.97 X 149.61 X 149.34 | 22437 | 8.619 | 593.0 | 26.4 | |
| 3 | Cement Concrete Pavement | M30 | 12/09/2019 | 19/09/2019 | 149.92 X 149.45 X 150.52 | 22406 | 8.991 | 556.5 | 24.8 | |

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ಜ. ದಾಸರಹಳ್ಳಿ ಉಪ ವಿಭಾಗ
ಬಿಬಿಎಂಪಿ, ಬಿ.ಬಿ.ಎಂ.ಪಿ
ಬೆಂಗಳೂರು ೫೬೦೦೭೩

CIVIL Pro Sig. Date. BANGALORE

**FOR CIVIL Pro.**

**R KARTHIK RECHAN**
Authorized Signatory
**Quality Manager**



****End of Report****

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# TEST REPORT OF CEMENT CONCRETE CUBES

**Lab ID** : CP-2019-09-12-33 **Date: 19/09/2019**

**Customer** : Assistant Executive Engineer, Dasarahalli Sub Division, BBMP, Bangalore.

**Address** : Dasarahalli Sub Division, BBMP, Bangalore.

**Project Name** : Improvements to Roads Drains and Other Development Works in Bagalagunte Ward No.14.

**Agency** : Sri Raghunandan L, #13, 2nd Main Road,Gandhigrama Maruthi Extension, Bengaluru-21.

**Customer's Reference** : EE/DD/WO/360/19-20

**Source of Sample** : Sample supplied by Agency

**Sample Condition** : Satisfactory

**Date of Receipt** : 14-09-19

**Customer ID** : Cement Concrete Pavement

**Sample Type /Size** : 150X150X150 mm

**Sample grade/Age** : M30 / 7 Days Compressive Strength

**Reference to BIS codes** : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

**Date of test** : 19/09/2019

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength ($N/mm^2$) | Average Compressive Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Cement Concrete Pavement | M30 | 12/09/2019 | 19/09/2019 | 151.91 X 151.83 X 149.06 | 23065 | 8.122 | 577.7 | 25.0 | 25.1 |
| 2 | Cement Concrete Pavement | M30 | 12/09/2019 | 19/09/2019 | 151.67 X 149.36 X 151.16 | 22655 | 8.619 | 590.5 | 26.1 | |
| 3 | Cement Concrete Pavement | M30 | 12/09/2019 | 19/09/2019 | 150.33 X 149.79 X 150.46 | 22519 | 8.991 | 543.4 | 24.1 | |

**Note:**

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****End of Report****

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HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

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# TEST REPORT OF CEMENT CONCRETE CUBES

**Date: 20/09/2019**

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2019-09-12-33** |
| **Customer** | : | Assistant Executive Engineer, Dasarahalli Sub Division, BBMP, Bangalore. |
| **Address** | : | Dasarahalli Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Improvements to Roads Drains and Other Development Works in Bagalagunte Ward No.14. |
| **Agency** | : | Sri Raghunandan L, #13, 2nd Main Road,Gandhigrama Maruthi Extension, Bengaluru-21. |
| **Customer's Reference** | : | EE/DD/WO/360/19-20 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 16-09-19 |
| **Customer ID** | : | Cement Concrete Pavement |
| **Sample Type /Size** | : | 150X150X150 mm |
| **Sample grade/Age** | : | M30 / 7 Days Compressive Strength |
| **Reference to BIS codes** | : | IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5 |
| **Date of test** | : | 20/09/2019 |

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength ($N/mm^2$) | Average Compressive Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Cement Concrete Pavement | M30 | 13/09/2019 | 20/09/2019 | 150.72 X 150.78 X 150.24 | 22725 | **8.122** | 568.7 | 25.0 | 25.5 |
| 2 | Cement Concrete Pavement | M30 | 13/09/2019 | 20/09/2019 | 151.31 X 151.32 X 149.69 | 22895 | **8.619** | 616.9 | 26.9 | |
| 3 | Cement Concrete Pavement | M30 | 13/09/2019 | 20/09/2019 | 150.97 X 150.69 X 150.78 | 22749 | **8.991** | 555.2 | 24.4 | |

**Note:**
The results pertain to the samples received and tested.
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**R KARTHIK RECHAN**
Authorized Signatory
**Quality Manager**


****End of Report****

# TEST RESULTS OF GRADATION FOR GSB
## (IS 2386:(Part 1) 1963 (RA2011)

| | | |
|---|---|---|
| **Lab ID** | : | **CP-RW-2019-09-12-33** **Date: 03-09-19** |
| **Customer** | : | Assistant Executive Engineer, Dasarahalli Sub Division, BBMP, Bangalore. |
| **Address** | : | Dasarahalli Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Improvements to Roads Drains and Other Development Works in Bagalagunte Ward No.014. |
| **Agency** | : | Sri Raghunandan L, #13, 2nd Main Road,Gandhigrama Maruthi Extension, Bengaluru-21. |
| **Customer Reference** | : | EE/DD/WO/360/19-20 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 31-08-19 |
| **Type of Mix** | : | GSB (Granular Sub Base) |
| **Date of test** | : | 31-08-19 |
| **Oven Dry Weight** | : | 10000 Grams |

| IS Sieve Size(mm) | Weight Retained (gm) | Cumulative Weight Retained (gm) | % Cumulative Weight Retained | % Passing | Spec. Limit Vide Table 400.1 MORTH Specification |
|---|---|---|---|---|---|
| 75 | 0 | 0 | 0 | 100 | 100 |
| 53 | 997 | 997 | 9.97 | 90.03 | 80-100 |
| 26.5 | 1685 | 2682 | 26.82 | 73.18 | 55-90 |
| 9.5 | 1292 | 3974 | 39.74 | 60.26 | 35-65 |
| 4.75 | 1490 | 5464 | 54.64 | 45.36 | 25-55 |
| 2.36 | 1764 | 7228 | 72.28 | 27.72 | 20-40 |
| 0.425 | 1666 | 8894 | 88.94 | 11.06 | 10-25 |
| 0.075 | 1106 | 10000 | 100.00 | 0.00 | 0-5 |

### TESTS ON FILLER SCREEN MATERIALS

| Sl no | Particulars | Test results | Spec.Limit Vide Table |
|---|---|---|---|
| 1 | Liquid Limit, % | 21.33% | Maximum 25 |
| 2 | Plasticity index, % | Non plastic | Maximum 6 |

**Note:-**

The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
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Samples will be disposed after 90 days from the date of issue of test certificate

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*End of Report*

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# QC ABSTRACT

**NAME OF WORK:** Improvements to Roads Drains and Other Development Works in Bagalagunte Ward No.14.

| SL NO | Item Of Work | Name of Test | Frequency of Test/Quantity | Executed Quantity | Number of Tests Required | Number of Tests Conducted |
|---|---|---|---|---|---|---|
| | | **Materials** | | | | |
| 1 | Cement | Fineness by dry sieving | One Test | | 1 | 1 |
| | | Finess by Air permeablity method | One Test | | 1 | 1 |
| | | Density | One Test | | 1 | 1 |
| | | Standard Consistency | One Test | | 1 | 1 |
| | | Initial Setting time | One Test | | 1 | 1 |
| | | Final Setting time | One Test | | 1 | 1 |
| | | Soundness (Le Chatelier's Method) | One Test | | 1 | 1 |
| | | Compressive Strength | One Test | | 1 | 1 |
| 2 | Coarse aggregate(40 mm down size) | SIEVE ANALYSIS | One Test | | 1 | 1 |
| | | Flakiness Index | One Test | | 1 | 1 |
| | | Elongation Index | One Test | | 1 | 1 |
| | | Specific Gravity | One Test | | 1 | 1 |
| | | Bulk Density(Loose) | One Test | | 1 | 1 |
| | | Bulk Density(Compacted) | One Test | | 1 | 1 |
| | | Water Absorption | One Test | | 1 | 1 |
| 3 | Coarse aggregate(20 mm down size) | SIEVE ANALYSIS | One Test | | 1 | 1 |
| | | Flakiness Index | One Test | | 1 | 1 |
| | | Elongation Index | One Test | | 1 | 1 |
| | | Specific Gravity | One Test | | 1 | 1 |
| | | Bulk Density(Loose) | One Test | | 1 | 1 |
| | | Bulk Density(Compacted) | One Test | | 1 | 1 |
| | | Water Absorption | One Test | | 1 | 1 |
| | | Aggregate crushing Value | One Test | | 1 | 1 |
| | | Aggregate Impact Value | One Test | | 1 | 1 |
| 4 | Fine aggregate | SIEVE ANALYSIS | One Test | | 1 | 1 |
| | | Water Absorption | One Test | | 1 | 1 |
| | | Specific Gravity | One Test | | 1 | 1 |
| | | Material finer than 75 micron | One Test | | 1 | 1 |
| 5 | Steel | Bend test | One Test | | 1 | 1 |
| | | Tensile Test | One Test | | 1 | 1 |
| | | Yield Test | One Test | | 1 | 1 |
| | | ReBend test | One Test | | 1 | 1 |
| 6 | Precast (100mm) | Core Compressive Strength | One Test | | 1 | 1 |
| | | Corrected Cylinder Compressive Strength | One Test | | 1 | 1 |
| | | Equivalent Cube Compressive Strength | One Test | | 1 | 1 |
| 7 | RCC(M20) | Compressive Strength(7days and 28days) | 4 set /31-50 cum | 39.6 | 8 | 8 |
| 8 | Cement Concrete Pavemet (M20) | Compressive Strength(7days and 28days) | 9 set /250-300cum | 262.5 | 18 | 18 |
| 9 | GSB | SIEVE ANALYSIS | One Test | | 1 | 1 |
| 10 | WMM | Sieve Analysis | One Test | | 1 | 1 |
| | | Impact Value | One Test | | 1 | 1 |
| | | Flakiness Index | One Test | | 1 | 1 |
| | | Elongation Index | One Test | | 1 | 1 |

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## TEST REPORT ON COARSE AGGREGATES

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2019-09-12-33** **Date: 17-08-19** |
| **Customer** | : | Assistant Executive Engineer, Dasarahalli Sub Division, BBMP, Bangalore. |
| **Address** | : | Dasarahalli Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Improvements to Roads Drains and Other Development Works in Bagalagunte Ward No.14. |
| **Agency** | : | Sri Raghunandan L, #13, 2nd Main Road,Gandhigrama Maruthi Extension, Bengaluru-21. |
| **Customer's Reference** | : | EE/DD/WO/360/19-20 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample condition** | : | Satisfactory |
| **Date of Receipt** | : | 14-08-19 |
| **Sample Type** | : | 40mm down size coarse aggregate |
| **Reference to BIS codes** | : | IS: 383:2016 (Specification for Coarse and fine Aggregates )<br>IS: 2386 :1963(Part - 1,3,4) RA2011<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption<br>IS 2386 Part 4: Mechanical Properties |
| **Date of test** | : | 14-08-19 |

**SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:**

**Total weight taken : 15000 grams**

| Sample No. | Sieve No. | Weight Retained in gms | Cumulative Weight Retained in gms | % Cumulative Weight Retained | % Passing | Required as per IS 383:2016 |
|---|---|---|---|---|---|---|
| 1 | 80 mm | 0 | 0 | 0.0 | 100 | 100 |
| 2 | 40 mm | 244 | 244 | 1.6 | 98.4 | 90-100 |
| 3 | 20 mm | 5432 | 5676 | 37.8 | 62.2 | 30-70 |
| 4 | 10 mm | 4332 | 10008 | 66.7 | 33.3 | 10-35 |
| 5 | 4.75 mm | 4654 | 14662 | 97.7 | 2.3 | 0-5 |
| 6 | Pan | 338 | 15000 | 100.0 | 0 | --- |



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